Ex.No:2   **Date:22/08/25**

CRACK THE HASHES

AIM:

To install and crack the hashed passwords using John-the-Ripper tool in Kali Linux.

ALGORITHM:

1. Install John-the-Ripper on your system using sudo apt install john

2. Prepare the hash file hashes.txt that is to be cracked.

3. Run John-the-Ripper specifying the path to the wordlist.txt and hashes.txt

4. Monitor the cracking process using status option in another terminal

OUTPUT:

```
┌──(JackSparrow㉿Captain)-[~]
└─$ sudo apt-get install john
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following packages were automatically installed and are no longer required:
  binutils-mingw-w64-i686 binutils-mingw-w64-x86-64 gcc-mingw-w64-base gcc-mingw-w64-i686-win32
  gcc-mingw-w64-i686-win32-runtime gcc-mingw-w64-x86-64-win32 gcc-mingw-w64-x86-64-win32-runtime
  libaio1t64 mingw-w64-common mingw-w64-i686-dev mingw-w64-x86-64-dev nasm oracle-instantclient-basic
  postgresql ruby-json
Use 'sudo apt autoremove' to remove them.
The following NEW packages will be installed:
  john
0 upgraded, 1 newly installed, 0 to remove and 651 not upgraded.
Need to get 0 B/14.7 MB of archives.
After this operation, 82.0 MB of additional disk space will be used.
Selecting previously unselected package john.
(Reading database ... 229888 files and directories currently installed.)
Preparing to unpack .../john_1.9.0-Jumbo-1+git20211102-0kali10_amd64.deb ...
Unpacking john (1.9.0-Jumbo-1+git20211102-0kali10) ...
Setting up john (1.9.0-Jumbo-1+git20211102-0kali10) ...
mode of '/var/run/john' changed from 0755 (rwxr-xr-x) to 0700 (rwx------)
Processing triggers for kali-menu (2025.3.2) ...
Processing triggers for man-db (2.13.1-1) ...
```

```
┌──(JackSparrow⊗Captain)-[~]
└─$ echo -n helloworld | md5sum | awk '{print $1}' >hashess.txt

┌──(JackSparrow⊗Captain)-[~]
└─$ cat hashess.txt
fc5e038d38a57032085441e7fe7010b0

┌──(JackSparrow⊗Captain)-[~]
└─$ john --format=raw-md5 --wordlist=/usr/share/wordlists/rockyou.txt hashess.txt
Using default input encoding: UTF-8
Loaded 1 password hash (Raw-MD5 [MD5 256/256 AVX2 8x3])
Warning: no OpenMP support for this hash type, consider --fork=12
Press 'q' or Ctrl-C to abort, almost any other key for status
helloworld       (?)
1g 0:00:00:00 DONE (2025-11-15 21:34) 33.33g/s 921600p/s 921600c/s 921600C/s my3babies..010293
Use the "--show --format=Raw-MD5" options to display all of the cracked passwords reliably
Session completed.
```

RESULT:

Thus, successfully installed John-the-Ripper tool and cracked the password hashes.